



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,427	11/28/2003	Yasutaka Sugawara	117900	7364
25944	7590	12/29/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			IP, SIKYIN	
			ART UNIT	PAPER NUMBER
			1742	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/29/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/722,427	SUGAWARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sikyin Ip	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10/04/06.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.  
 4a) Of the above claim(s) 7 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c ) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4599119 to Ikushima et al.

Ikushima discloses Cu-Ti alloy composition with second phase elements (col. 2, lines 10-31), secondary phase size and distribution (col. 3, lines 10-31 and col. 4, lines 20-22), and processing steps such as solution heat treatment, working, and aging (col. 3, lines 32-56) except for the percent of conversion to second phase particle, area percentage, dispersion degree between particle. However, the instant Cu-Ti alloy composition and second phase elements contents, solution heat treatment, working, and aging steps are overlapped by the cited reference; consequently, the properties as

recited in the instant claims would have inherently possessed by the teachings of the cited reference. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product.

In re Best, 195 USPQ, 430 and MPEP § 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)."

With respect to the dispersion degree equation as recited in instant claims 4 and 5, that it is well settled that there is no invention in the discovery of a general formula if it covers a composition (second phase particle size) described in the prior art, In re Cooper and Foley, 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, Taklatwalla v. Marburg, 620 O.G. 685, 1949 C.D. 77, and In re Pilling, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. In re Austin, et al., 149 USPQ 685, 688.

#### ***Response to Arguments***

Applicant's arguments filed October 4 2006 have been fully considered but they are not persuasive.

Applicants argue that

Ikushima does not teach or suggest a copper alloy comprising second-phase particles represented by Cu-Ti-X system particles, wherein X is selected from " the group consisting of Fe, Co, Ni, Cr, V, Zr, B, and P, as recited in claims 1-6. " But, Ikushima in col. 2

**2**

10 The alloy of this invention is a copper-based alloy consisting mainly of copper and containing 2 to 6% by weight of titanium.

**2**  
This invention is also applicable to other copper alloys containing at least one of other elements, such as Fe, Zr, Cr, B and Si, in addition to 2 to 6% by weight of titanium. Such other element(s) is (are) generally contained up to 2.0% by weight in a total amount.

**2**  
60 The fine and uniform secondary phase formed by the intermediate annealing in the master phase contributes to avoiding the coarsening of crystal grains in the master phase during the final solution heat treatment of the alloy and thereby developing a desired solution heat treated structure having an average crystal grain size not exceeding 25 microns.

There is no factual evidence from applicants that Cu-Ti-X system particles have not been inherently formed in Ikushima alloys.

Ikushima teaches that the anneal is performed at a temperature which is lower than both the solid solution-forming temperature and the recrystallization temperature (500 to 700°C for 1 to 20 hours). This is important for the precipitation of a fine and uniformly distributed secondary phase. See column 2, lines 39.

Applicants argue that " 51 of Ikushima. " But, first,

instant claims are product claims and processing steps have no patentable weight unless applicants have shown the processing steps are required to produce recited

**3**  
This solution heat treatment is performed for a period of time ending immediately after or before the secondary phase forms a complete solid solution in the master phase. This period of time depends on various factors, such as the chemical composition, thickness or size of the alloy, the size of the secondary phase and the working done for the alloy.

Applicants' argument replied on submitted article in pages 6-8 of instant remarks is noted. But, first, said article has limited English translation. Second, based on the English translation, there is no additional elements such as Fe, Zr, B, and etc as taught

by Ikushima. Third, secondary phase as taught by Ikushima forms during solution heat

3

This solution heat treatment is performed for a period of time ending immediately after or before the secondary phase forms a complete solid solution in the master <sup>35</sup> phase. This period of time depends on various factors, such as the chemical composition, thickness or size of the alloy, the size of the secondary phase and the working done for the alloy. ).

## Conclusion

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

### Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

S. Ip  
December 23, 2006

  
**SIKYIN IP**  
**PRIMARY EXAMINER**